

# Recycling Online



## Waking up to mattress recycling

by Roger Guttentag

According to the Mattress Recycling Council (MRC), a product stewardship program administered by the ISPA, most mattress recycling facilities are nonprofit organizations using manual disassembly methods. For a good example of this type of operation, head to a short YouTube video highlighting Spring Back Recycling of Nashville, Tenn., a socially minded effort developed by Belmont University Enactus and the Isaiah 58 ministry (an inner-city program of the Belmont Church).

However, to see a high-tech version of mattress recycling, go to the website of Retour Matras, a Dutch company. The business provides a video and photos showing how mattresses are processed on a disassembly line that uses automated machinery to recover textiles, foam and steel.

## Making the case for EPR

The Product Stewardship Institute (PSI) began to conduct research on the issues associated with the end-of-life management for mattresses in 2010 and issued a briefing document based on its research findings in 2011. The California Product Stewardship Council (CPSC) published its own mattress white paper with funding support from the City of Napa. Those documents argued for extended producer responsibility (EPR) solutions, in which mattress manufacturers would fund and manage end-of-life concerns for their products. The product stewardship groups pushed for an industry-backed system for the following reasons:

- Cost of disposal on local communities
- Cost and environmental impact of illegal dumping
- Lack of collection and processing infrastructure
- Job creation potential
- Greenhouse gas emission reduction

With respect to the last two reasons, a 2012 report to CalRecycle, “California Mattress

and Box Spring Case Study,” estimated that if an EPR system was able to prevent the disposal of 4.2 million units in the state (the estimated disposal total in 2012), the materials recovery infrastructure would create 1,000 jobs and reduce greenhouse gas emissions by 130,000 to 190,000 tons.

PSI, in its mattress-briefing document, discussed how the funding for an EPR system could be accomplished through either an explicit advance-recycling fee that is paid by the consumer or through an internalized EPR cost that is incorporated into the final price paid by the consumer. ISPA supported the first option. However, the CSPC criticized this approach on the basis that it does not provide the manufacturer with an economic incentive to adopt more environmentally sustainable designs for products.

## Current programs

In 2013, the states of California, Connecticut and Rhode Island enacted mattress EPR legislation, with each state’s program being administered by the MRC. Information on each program can be found on the MRC site. Connecticut’s program was fully implemented in May 2015, while the other two state programs are scheduled to launch in 2016. In all three arrangements, the consumer pays an advance-recycling fee, which is then remitted by the retailer to the manufacturer of the purchased product. These funds, in turn, are used by the MRC to pay for all collection and recycling services. The state government has no role in the management of collected funds or recycling services. Differences between these programs can be seen by following the legislative links provided by the MRC.

I would also recommend checking the LinkUp mattress page managed by King County, Washington, which maintains links to news items about EPR developments within the U.S. and in other countries.

Most everyone reading this likely woke up this morning on a bed with a mattress and box spring. These two items are among the most ubiquitous and necessary of purchases, ranging somewhere between 35 million to 40 million units sold annually in the U.S. The items are bought by households as well as many businesses and institutions such as colleges and universities, hotels and hospitals. Yet there is scant data on how many of these units are replacement purchases and what happens to the products they replace. While some discarded mattresses may be reused or refurbished, most are simply disposed in landfills or waste-to-energy facilities. The International Sleep Products Association (ISPA) estimates this disposal rate is equal to about 50 percent of new-unit sales, which works out to be about 50,000 units per day.

## Recycling as an alternative

When the term “mattress recycling” is used, we’re really referring to a disassembly process that seeks to separate – at the lowest cost – the recyclable mattress components into separate streams that can be sent to other facilities to be actually recycled. Typical materials in mattresses and box springs include steel scrap, fibers, foam and wood. The National Recycling Coalition, in conjunction with the Pennsylvania Recycling Markets Center, produced a webinar last November that summarizes mattress recycling and the materials recovered. Additionally, readers can find material-characterization information for a typical mattress on the Connecticut Department of Energy and Environmental Protection (DEEP) site.

## Other options

For residents living in the 47 states without a mattress EPR system, disposal advice can be found at the Natural Resources Defense Council's site, which provides a number of links and suggestions on where you can donate or recycle sleep products. Another resource is the Google mattress recycling facility map that can be found on the Sleep On Latex (a Chicago-based sleep products business) website. Locations of mattress recycling operations in the U.S. are marked with a blue pin that users can click on for contact information.

While doing the research for this column I was struck by how little attention is paid to the issue of mattress lifespans. The Better Sleep Council suggests consumers should consider replacing their mattresses every seven years. However, Consumer Reports counters that if proper care practices are followed, a mattress's useful life could be up to 10 years. While government bodies and industry should certainly develop convenient recycling

## Web Address Directory

The Better Sleep Council	<a href="http://tinyurl.com/Bettersleep-Recycling">tinyurl.com/Bettersleep-Recycling</a>
California Product Stewardship Council – Mattresses	<a href="http://calpsc.org/products/mattresses">calpsc.org/products/mattresses</a>
Connecticut Department of Energy and Environmental Protection – Mattress Recycling	<a href="http://tinyurl.com/CT-Mattress">tinyurl.com/CT-Mattress</a>
Consumer Reports – How Often Should I Buy a New Mattress?	<a href="http://tinyurl.com/CR-Mattress">tinyurl.com/CR-Mattress</a>
King County (Wash.) – Link Up – Mattresses	<a href="http://tinyurl.com/WA-Mattress">tinyurl.com/WA-Mattress</a>
Mattress Recycling Council	<a href="http://mattressrecyclingcouncil.org">mattressrecyclingcouncil.org</a>
National Recycling Coalition – Mattress Recycling Webinar	<a href="http://tinyurl.com/NRC-Mattress">tinyurl.com/NRC-Mattress</a>
Natural Resources Defense Council – Donate or Recycle Your Mattress	<a href="http://tinyurl.com/NRDC-Mattress">tinyurl.com/NRDC-Mattress</a>
Product Stewardship Institute – Mattresses	<a href="http://tinyurl.com/PSI-Mattress">tinyurl.com/PSI-Mattress</a>
RetourMatras	<a href="http://tinyurl.com/RetourMatras">tinyurl.com/RetourMatras</a>
Sleep on Latex – 100 Places to Recycle Your Old Mattress	<a href="http://tinyurl.com/SleepOn-Mattress">tinyurl.com/SleepOn-Mattress</a>
Spring Back Recycling	<a href="http://springbackrecycling.com">springbackrecycling.com</a>
Spring Back Recycling Video	<a href="http://tinyurl.com/SpringBack-Mattress">tinyurl.com/SpringBack-Mattress</a>

systems for mattresses and box springs, all stakeholders should also do a better job of informing users on how better care will extend the life of an expensive product while reducing the environmental impact stemming from its disposal.

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